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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/635,524	08/09/2000	Hiroyuki Takahashi	P19483	5635

7055 7590 01/21/2004

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EXAMINER

LEE, CHRISTOPHER E

ART UNIT	PAPER NUMBER
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2112

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/635,524

Applicant(s)

TAKAHASHI, HIROYUKI

Examiner

Christopher E. Lee

Art Unit

2112

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Receipt Acknowledgement

1. Receipt is acknowledged of the After Final Amendment filed on 8th of December 2003. Claims 1-7 have been amended; no claim has been canceled; and no claim has been newly added since the last Office Action was mailed on 7th of October 2003.

2. Receipt is acknowledged of the request filed on 7th of January 2004 for a Request for Continued Examination (RCE) under 37 CFR 1.114 based on the Application No. 09/635,524, which the request is acceptable and an RCE has been established. Currently, claims 1-7 are pending in this application.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for scrapping return-address, temporarily stored in the stack memory area of the RAM, without being restored into the program counter, and jumping to the instruction for calling the next subroutine (See Application, page 70, lines 1-15, and Fig. 31, steps J3 and J4), does not reasonably provide enablement for setting return-address data in the program counter to coincide with the comparison address data (viz., address data of the defective part in the ROM) when execution of the interruption-process is completed (See Claim 1, lines 23-25) for virtually revising the programs stored in the read-only memory (See Claim 1, lines 7-10). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. Moreover, the claim 1 recites the limitation "an address-coincidence-disabling system that disables the coincidence between said comparison address data and said return-address set in said program counter by said return-address-setter", which causes that the claimed invention cannot

achieve the objective of the applicant's invention, such that the objection of the applicant's invention is to provide a microcomputer with a program-revision ability, wherein a revision can be made in an optional location of programs stored in a ROM thereof (See Application, page 4, line 23 through page 5, line 1), because said controller/calculator (i.e., CPU) would fetch and execute the defective part of ROM after completion of the revision execution, i.e., the program counter has been set said comparison address data (i.e., address data of the defective part in ROM) as the return address of the interrupt-processing when the interruption-processing has been completed, and furthermore, the address-coincidence-disabling system disables the coincidence between the comparison address data and the return-address set in said program counter by said return-address-setter, i.e., making the controller/calculator fetch and execute the defective part of ROM. The claims 2-7 are dependent claims of the claim 1.

Response to Arguments

5. Applicant's arguments filed on 8th of December 2003 have been fully considered but they are not persuasive.

In response to the Applicant's argument with respect to the claims 1-7 rejection under 35 U.S.C. § 112, first paragraph about scope enablement, on the Response pages 6-9, the Examiner believes that the Applicant misinterpreted the claims rejections and the arguments responses.

The Examiner would like to just restate once more the reasons of the claims 1-7 rejection under 35 U.S.C. § 112, first paragraph of the scope enablement, which had been discussed/addressed on the Final Office Action mailed on 7th of October 2003 and the Advisory Action mailed on 29th of December 2003.

The Applicant states that the return-address, temporarily stored in the stack memory area of the RAM, is scrapped without being returned to the program counter (See Application, page 70, lines 1-4), and restored into the program counter, and jumping to the instruction for calling the next subroutine (See Application, page 70, lines 1-15, and Fig. 31, steps J3 and J4). In other words, the defected part in the

ROM is skipped over, and the program counter is pointing out the instruction for calling the next subroutine, which is under a good condition in the ROM.

However, the Applicant's disclosure does not reasonably provide enablement for the scope of the claimed invention, such that setting return-address data in the program counter to coincide with the comparison address data (viz., address data of the defective part in the ROM) when execution of the interruption-process is completed (See Claim 1, lines 23-25) for virtually revising the programs stored in the read-only memory (See Claim 1, lines 7-10) because the comparison address data has been clearly defined as an address data of the program in the ROM, which is to be virtually revised by a revisional program in the RAM (See Claim 1, lines 7-12), then a return-address-setter sets return-address data in the program counter to coincide with the comparison address data (i.e., address data of the program in the ROM) when execution of the interruption-process in accordance with the revisional program is completed (i.e., after the completion of revisional program execution, the program in the ROM (i.e., the defected part of ROM), which has been revised by the revisional program in the RAM, is run by the controller/calculator based on the program counter, instead of skipping over the revised program in the ROM; See Claim 1, lines 23-25).

Furthermore, the Applicant recites the limitation "an address-coincidence-disabling system that disables the coincidence between said comparison address data and said return-address set in said program counter by said return-address-setter" (See Claim 1, lines 26-28), which causes that the claimed invention cannot achieve the objective of the applicant's invention, such that the objection of the applicant's invention is to provide a microcomputer with a program-revision ability, wherein a revision can be made in an optional location of programs stored in a ROM thereof (See Application, page 4, line 23 through page 5, line 1), because said controller/calculator (i.e., CPU) would fetch and execute the defective part of ROM after completion of the revision execution, i.e., the program counter has been set said comparison address data (i.e., address data of the defective part in ROM) as the return address of the interrupt-processing when the

interruption-processing has been completed, i.e., making the controller/calculator fetch and execute the defective part of ROM.

Even though the specification is sufficiently enabling with respect to the Applicant's invention based on the text disclosure, pages 47-48 and page 70, lines 1-15, it does not reasonably provide enablement of the scope of the Applicant's claimed invention, especially the subject matters in the claim 1.

Moreover, it is noted that the feature upon which the Applicants relied (i.e., the Address-Coincidence (AC) signal) is not recited in the rejected claim(s). Instead, the claim 1 recites the limitation "return-address data to coincide with the comparison address data", and the subject matter "return-address data" is set to point out the address (i.e., the subject matter "comparison address data") of the defective part of the ROM. Although the claim 1 is interpreted in light of the specification, the limitation from the specification is not read into the claim. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Thus, the Applicant's argument on this point is not persuasive.

Conclusion

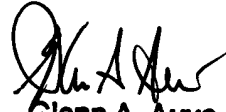
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher E. Lee whose telephone number is 703-305-5950. The examiner can normally be reached on 9:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark H. Rinehart can be reached on 703-305-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Christopher E. Lee
Examiner
Art Unit 2112

cel/ *CEL*


Glenn A. Auve
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